

Examiner Amendment

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.
2. Authorization for this examiner's amendment was given in a telephone interview with John Laurence on 02/10/11.

The application has been amended as follows:

IN THE CLAIMS:

Claim 1 (Currently amended). An image sensing apparatus having at least a filter insertion/removal device which is operated by a user and inserts and removes an optical filter for reducing a light quantity to an image sensing element serving as an optical system, comprising:

a signal processing device which performs signal processing so as to generate image data from an image sensing signal output from the image sensing element;

a brightness value calculation device which calculates a brightness value representing a brightness of part or all of an object which is imaged on the image sensing element;

a brightness value correction device which calculates a second brightness value by correcting a first brightness value on the basis of a difference between the first brightness value and a light reduction amount generated by inserting the optical filter by the filter insertion/removal device operated by the user, wherein the first brightness value is calculated by said brightness value calculation device in a case that the optical filter is inserted by the filter insertion/removal device operated by the user; and

a control device which controls the signal processing in said signal processing device by using the second brightness value.

Claim 3 (Currently amended). An image sensing apparatus having at least a filter insertion/removal device which is operated by a user and inserts and removes an optical filter for reducing a light quantity to an image sensing element serving as an optical system, comprising:

a signal processing device which performs signal processing so as to generate image data from an image sensing signal output from the image sensing element;

a brightness value calculation device which calculates a brightness value representing a brightness of part or all of an object which is imaged on the image sensing element;

a brightness value correction device which calculates a second brightness value by correcting a first brightness value on the basis of a difference between the first brightness value and a light reduction amount generated by inserting the optical filter by the filter insertion/removal device operated by the user, wherein the first brightness value is calculated by said brightness value calculation device in a case that the optical filter is inserted by the filter insertion/removal device operated by the user; and

a control device which controls an optical system by using the second brightness value.

Claim 8 (Currently amended). An image sensing method using an image sensing apparatus having at least a filter insertion/removal device which is operated by a user and inserts and removes an optical filter for reducing a light quantity to an image sensing element serving as an optical system, comprising:

a first step of calculating a brightness value representing a brightness of part or all of an object which is imaged on the image sensing element;

a second step of calculating a second brightness value by correcting a first brightness value calculated in the first step on the basis of a difference between the first

brightness value and a light reduction amount generated by inserting the optical filter by the filter insertion/removal device operated by the user, wherein the first brightness value is calculated by said first step in a case that the optical filter is inserted by the filter insertion/removal device operated by the user; and

a third step of controlling, by using the second brightness value calculated in the second step, signal processing of generating image data from an image sensing signal output from the image sensing element.

Claim 10 (Currently amended). An image sensing method using an image sensing apparatus having at least a filter insertion/removal device which is operated by a user and inserts and removes an optical filter for reducing a light quantity to an image sensing element serving as an optical system, comprising:

a first step of calculating a brightness value representing a brightness of part or all of an object which is imaged on the image sensing element;

a second step of calculating a second brightness value by correcting a first brightness value calculated in the first step on the basis of a difference between the first brightness value and a light reduction amount generated by inserting the optical filter by the filter insertion/removal device operated by the user, wherein the first brightness value is calculated by said first step in a case that the optical filter is inserted by the filter insertion/removal device operated by the user; and

a third step of controlling an optical system by using the second brightness value calculated in the second step.

Claim 12 (Currently amended). A non-transitory computer readable recording medium which records a program for controlling an image sensing apparatus having at least a filter insertion/removal device which is operated by a user and inserts and removes an optical filter for reducing a light quantity to an image sensing element serving as an optical system, the program causing a computer in the image sensing apparatus to execute:

a first step of calculating a brightness value representing a brightness of part or all of an object which is imaged on the image sensing element;

a second step of calculating a second brightness value by correcting a first brightness value calculated in the first step on the basis of a difference between the first brightness value and a light reduction amount generated by inserting the optical filter by the filter insertion/removal device operated by the user, wherein the first brightness value is calculated by said first step in a case that the optical filter is inserted by the filter insertion/removal device operated by the user; and

a third step of controlling, by using the second brightness value calculated in the second step, signal processing of generating image data from an image sensing signal output from the image sensing element.

Claim 14 (Currently amended). A non-transitory computer-readable recording medium which records a program for controlling an image sensing apparatus having at least a filter insertion/removal device which is operated by a user and inserts and removes an optical filter for reducing a light quantity to an image sensing element serving as an optical system, the program causing a computer in the image sensing apparatus to execute:

a first step of calculating a brightness value representing a brightness of part or all of an object which is imaged on the image sensing element;

a second step of calculating a second brightness value by correcting a first brightness value calculated in the first step on the basis of a difference between the first brightness value and a light reduction amount generated by inserting the optical filter by the filter insertion/removal device operated by the user, wherein the first brightness value is calculated by said first step in a case that the optical filter is inserted by the filter insertion/removal device operated by the user; and

a third step of controlling an optical system by using the second brightness value calculated in the second step.

Claim 16 (Currently amended). A non-transitory computer readable medium having stored there on a program for causing a computer to execute a method of

controlling an image sensing apparatus having at least a filter insertion/removal device which is operated by a user and inserts and removes an optical filter for reducing a light quantity to an image sensing element serving as an optical system, the method comprising:

a first step of calculating a first brightness value representing a brightness of part or all of an object which is imaged on the image sensing element;

a second step of calculating a second brightness value by correcting a first brightness value calculated in the first step on the basis of a difference between the first brightness value and a light reduction amount generated by inserting the optical filter by the filter insertion/removal device operated by the user, wherein the first brightness value is calculated by said first step in a case that the optical filter is inserted by the filter insertion/removal device operated by the user; and

a third step of controlling, by using the second brightness value calculated in the second step, signal processing of generating image data from an image sensing signal output from the image sensing element.

Claim 17 (Currently amended). A non-transitory computer readable medium having stored thereon ~~The~~ the program according to claim 16, wherein control of the signal processing in the third step of the method includes control of white balance processing.

Claim 18 (Currently amended). A non-transitory computer readable medium having stored thereon a program for causing a computer to execute a method of controlling an image sensing apparatus having at least a filter insertion/removal device which is operated by a user and inserts and removes an optical filter for reducing a light quantity to an image sensing element serving as an optical system, the method comprising:

a first step of calculating a first brightness value representing a brightness of part or all of an object which is imaged on the image sensing element;

a second step of calculating a second brightness value by correcting a first brightness value calculated in the first step on the basis of a difference between the first brightness value and a light reduction amount generated by inserting the optical filter by the filter insertion/removal device operated by the user, wherein the first brightness value is calculated by said first step in a case that the optical filter is inserted by the filter insertion/removal device operated by the user; and

a third step of controlling an optical system by using the second brightness value calculated in the second step.

Claim 19 (Currently amended). A non-transitory computer readable medium having stored thereon ~~The~~ the program according to claim 18, wherein control of the

optical system in the third step of the method includes control of exposure value to the image sensing element.

Allowable Subject Matter

3. Claims 1-19 are allowed.
4. The following is a statement of reasons for the indication of allowable subject matter:

Regarding **independent claim 1, 3, 8, 10, 12, 14, 16 and 18**, the prior art of record fail to teach or suggest the claimed limitations with the reasons set forth in the Applicant's Remarks filed on 07/07/10. Therefore, the **independent claims 1, 3, 8, 10, 12, 14, 16 and 18** are allowed based on the Remarks and the examiner amendment.

Regarding dependent **claims 2, 6, 7, 4-5,9,11, 13, 15, 17, 19** the claims are allowed as being dependent upon claim 1, 3, 8, 10, 12, 14,16 and 18 respectively.

5. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to HUNG H. LAM whose telephone number is (571)272-7367. The examiner can normally be reached on Monday - Friday 8AM - 5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, SINH TRAN can be reached on 571-272-7564. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Hung H Lam/

Examiner, Art Unit 2622

02/12/11